

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

BRIAN L. AREND ET AL.

Serial No.: 09/770,551

Filed: January 26, 2001

For: WIRELESS TELECOMMUNICATIONS SIGNAL INHIBITION

Attorney Docket No.: 1801/USW0596PUS

Group Art Unit: 2617

Examiner: Naghmeh Mehrpour

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief in support of an Appeal from the final rejection of claims 1-11 and 13-21 in the Office Action mailed December 17, 2007 for the above-identified patent application.

**I. REAL PARTY IN INTEREST**

The real party in interest is Qwest Communications International Inc. ("Assignee"), a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 1801 California Street, 38<sup>th</sup> Floor, Denver, Colorado 80202, as set forth in the assignment recorded in the U.S. Patent and Trademark Office on January 26, 2001, at Reel 011498 / Frame 0030.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no appeals or interferences known to the Appellants, the Appellants' legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## **III. STATUS OF CLAIMS**

Claims 1-11 and 13-21 are pending. Claims 12 and 22 are cancelled. Claims 1-11 and 13-21 are rejected and are the subject of this appeal.

## **IV. STATUS OF AMENDMENTS**

None.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Claim 1 provides a method for inhibiting wireless telecommunications within a limited region of the telecommunications coverage. The method includes generating a plurality of noise signals, each signal within a different portion of the frequency range of the wireless telecommunication. Application, p. 8, ll. 13-18. The method also includes broadcasting the plurality of noise signals from different locations into the region such that telecommunications is inhibited in the overlap of the broadcasted noise signals. Application, p. 8, ll. 18-20.

Claim 13 provides a system for inhibiting wireless telecommunications within a limited region of the telecommunications coverage. The system includes a plurality of radio frequency noise generators. Application, Figure 1, element 32. Each generator generates a noise signal within a different portion of the frequency range of the wireless telecommunications. Application, p. 8, ll. 13-18. The system also includes a plurality of antennas. Application, Figure 2, elements 62. Each antenna is in communication with one of the generators. Application, p. 4, ll. 17-25. Each antenna has an antenna coverage area, the limited region of the telecommunications coverage formed by overlapping antenna coverage areas. Application, p.

4, ll. 23-25. The system further includes control logic operative to initiate or suspend broadcasting of each noise signal based on at least one control input. Application, p. 5, ll. 21-27.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 4, 7, 9, 11, 13, 15, 17, 19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,222,458 (Harris). Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris in view of U.S. Pat. No. 4,498,193 (Richardson). Claims 3, 5-6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris in view of International Publication WO 98/34412 (Geyra). Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris in view of U.S. Pat. No. 6,570,689 (Kushita).

## **VII. ARGUMENT**

### **A. Claims 1, 4, 7, 9, 11, 13, 15, 17, 19 and 21 are Patentable Under 35 U.S.C. 102(e) Over Harris**

With regard to claim 1, Harris does not teach broadcasting the plurality of noise signals from different locations into the region such that telecommunication is inhibited in the overlap of the broadcasted noise signals. Rather, Harris indicates that

another modification of the FIG. 2 embodiment includes a short-range jammer 220 within the protected area 200. If a jammer is used, the shielding can be less complete. The jammer is placed close to the shield, e.g., under the shielded roof as shown.

The jammer operates by sweeping across all the cellular phone frequencies of interest. For example, a triangle wave generator 222 can be used to drive a varactor diode 224 configured as a tuner part, to sweep across all the frequencies. The jammer is driven by white or pink noise from noise generator 226. RF

transmitter 228 transmits white or pink noise across the entire frequency band over which cellular phones transmit and receive.

Harris, col. 3, ll. 41-53 (emphasis added).

Harris discloses the use of a single short-range jammer 220. Harris, col., 3, ll.42-43. The single short-range jammer 220 of Harris does not (and cannot) broadcast a plurality of noise signals from different locations. Moreover, nothing in Harris suggests an overlap of broadcasted noise signals, *a fortiori*, that telecommunications is inhibited in the overlap of the broadcasted noise signals. See, Harris.

In response, the Examiner asserts that

Harris teaches protection against use of a two way radio, e.g., a cellular phone, at a combustible delivery station. One mode is active, and detects operating cell phones at the gas station. The phones can be detected using Bluetooth. The pump can be turned off when the alarm is detected. Another mode is passive. This mode can be via shielding, alone or with RF jamming. Harris does not specifically mention a band pass filter accepting the wideband noise signal and producing the noise signal within the frequency range of the wireless telecommunication. However Richardson teaches a noise generate 1 which is arranged to produce a signal at 25 hKz (wideband) . . . and a bandpass filter 4, that accepts the wideband noise signal and produces the noise signal within the frequency range of the wireless telecommunication . . . . Therefore, by combining the above teaching of Richardson with Harris, providing a front end receiver for a wideband communication signal which is easy to implement and over comes signal gain.

Office Action, December 17, 2007, pp. 9-10 (emphasis added).

The Examiner appears to argue that Richardson somehow remedies the apparent fact that "Harris does not specifically mention a band pass filter accepting the wideband noise signal and producing the noise signal within the frequency range of the wireless telecommunication," Office

Action, December 17, 2008, p. 8. Applicants' Attorney, however, notes that claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Harris and that arguments directed to teachings from references other than Harris would seem to be improper. See, MPEP 2131 ("To anticipate a claim, the reference must teach every element of the claim.") Moreover, the arguments made by the Examiner do not address the argument that Harris discloses the use of only a single short-range jammer 220 and, as such, Harris cannot broadcast a plurality of noise signals from different locations and cannot disclose that telecommunications is inhibited in the overlap of the broadcasted noise signals.

Claim 13 is patentable for the reasons claim 1 is patentable.

Claims 4, 7, 9 and 11 are patentable because they depend from claim 1. Claims 15, 17, 19 and 21 are patentable because they depend from claim 13.

**B. Claims 8 and 18 are Patentable Under 35 U.S.C. 103(a) Over Harris**

Claims 8 and 18 are patentable because they depend from claims 1 and 13 respectively.

**C. Claims 2 and 14 are Patentable Under 35 U.S.C. 103(a) Over Harris in View of Richardson**

Claims 2 and 14 are patentable because they depend from claims 1 and 13 respectively.

**D. Claims 3, 5-6 and 16 are Patentable Under 35 U.S.C. 103(a) Over Harris in View of Geyra**

Claims 3 and 5-6 are patentable because they depend from claim 1. Claim 16 is patentable because it depends from claim 13.

**E.      Claims 10 and 20 are Patentable Under**  
**35 U.S.C. 103(a) Over Harris in View of Kushita**

Claims 10 and 20 are patentable because they depend from claims 1 and 13 respectively.

The fee of \$510 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2) is enclosed. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

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Enclosure - Appendices

## **VIII. CLAIMS APPENDIX**

1. A method for inhibiting wireless telecommunications within a limited region of the telecommunications coverage comprising:

generating a plurality of noise signals, each signal within a different portion of the frequency range of the wireless telecommunication; and

broadcasting the plurality of noise signals from different locations into the region such that telecommunications is inhibited in the overlap of the broadcasted noise signals.

2. A method for inhibiting wireless telecommunications as in claim 1 wherein generating the plurality of noise signals comprises generating at least one wide band noise signal and band pass filtering the wide band noise signal.

3. A method for inhibiting wireless telecommunications as in claim 1 wherein broadcasting the plurality of noise signals comprises broadcasting using at least one directional antenna to achieve the limited region.

4. A method for inhibiting wireless telecommunications as in claim 1 wherein the wireless telecommunications is through spread spectrum, the plurality of noise signals generated substantially across the spread spectrum.

5. A method for inhibiting wireless telecommunications as in claim 1 further comprising controlling broadcasting the plurality of noise signals based on a public event.

6. A method for inhibiting wireless telecommunications as in claim 5 wherein the broadcast of the plurality of noise signals is automatically based on at least one condition of the public event.

7. A method for inhibiting wireless telecommunications as in claim 1 wherein the region is the inside of a vehicle.

8. A method for inhibiting wireless telecommunications as in claim 7 wherein the vehicle is an aircraft.

9. A method for inhibiting wireless telecommunications as in claim 7 wherein the vehicle is an automotive vehicle.

10. A method for inhibiting wireless telecommunications as in claim 9 further comprising controlling broadcasting the plurality of noise signals based on detecting the presence of a telephone in a cradle.

11. A method for inhibiting wireless telecommunications as in claim 9 further comprising controlling broadcasting the plurality of noise signals based on detecting at least one condition of the automotive vehicle.

13. A system for inhibiting wireless telecommunications within a limited region of the telecommunications coverage comprising:

a plurality of radio frequency noise generators, each generator generating a noise signal within a different portion of the frequency range of the wireless telecommunications;

a plurality of antennas, each antenna in communication with one of the generators, each antenna having an antenna coverage area, the limited region of the telecommunications coverage formed by overlapping antenna coverage areas; and

control logic operative to initiate or suspend broadcasting of each noise signal based on at least one control input.

14. A system for inhibiting wireless telecommunications as in claim 13 wherein at least one of the plurality of radio frequency noise generators comprises:

a wide band noise source generating a wide band noise signal; and

a band pass filter accepting the wide band noise signal and producing the noise signal within the frequency range of the wireless telecommunication.



15. A system for inhibiting wireless telecommunications as in claim 13 wherein the wireless telecommunications is through spread spectrum, the noise signal generated by the plurality of radio frequency noise generators extends substantially across the spread spectrum.

16. A system for inhibiting wireless telecommunications as in claim 13 wherein the region encompasses a public event, the at least one control input based on a condition occurring at the public event.

17. A system for inhibiting wireless telecommunications as in claim 13 wherein the region is the inside of a vehicle.

18. A system for inhibiting wireless telecommunications as in claim 17 wherein the vehicle is an aircraft.

19. A system for inhibiting wireless telecommunications as in claim 17 wherein the vehicle is an automotive vehicle.

20. A system for inhibiting wireless telecommunications as in claim 17 wherein the at least one control input is based on detecting the presence of a telephone in a cradle.

21. A system for inhibiting wireless telecommunications as in claim 17 wherein the at least one control input is based on detecting at least one condition of the vehicle.

## **IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.